## **WEST Search History**

Hide Items	Restore	Clear	Cancel
W. S.	(1) (1) (1) (1) (1)	FB.	A CONTRACTOR OF

DATE: Monday, December 03, 2007

Hide?	Set Nam	e Query	Hit Count
	DB=PG	PB; PLUR=YES; OP=ADJ	
	L4	L3 and pitzele	1
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END OF SEARCH HISTORY

## 10/722,104 (RCE)

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* * * * * * * * * * * Welcome to STN International
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exact/norm bonds :
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isolated ring systems :
containing 1 :
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L1 STRUCTURE UPLOADED
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L2
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22819907 PD< NOV 2002

(PD<20021100)

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ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
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AN 1999:388166 CAPLUS Full-text

DN 131:44740

TI Preparation of N-hydroxytetrahydropyridylsulfonylacetamides and related compounds as matrix metalloprotease inhibitors.

IN Dack, Kevin Neil; Whitlock, Gavin Alistair

PA Pfizer Limited, UK; Pfizer Inc.

SO PCT Int. Appl., 149 pp.

CODEN: PIXXD2 DТ

Patent T D English

LA								
PAN.	PATENT NO.	KIN	D DATE	APPLICATION NO.	DATE			
PI	WO 9929667	A1	19990617	WO 1998-EP6640	19981009 <			
	W: AL, AM,	AT, AU,	AZ, BA, BB,	BG, BR, BY, CA, CH,	CN, CU, CZ; DE,			
	DK, EE,	ES, FI,	GB, GD, GE,	GH, GM, HR, HU, ID,	IL, IS, JP, KE,			
	KG, KP,	KR, KZ,	LC, LK, LR,	LS, LT, LU, LV, MD,	MG, MK, MN, MW,			
	MX, NO,	NZ, PL,	PT, RO, RU,	SD, SE, SG, SI, SK,	SL, TJ, TM, TR,			
	TT, UA,	UG, US,	UZ, VN, YU,	ZW				
	RW: GH, GM,	KE, LS,	MW, SD, SZ,	UG, ZW, AT, BE, CH,	CY, DE, DK, ES,			
	FI, FR,	GB, GR,	IE, IT, LU,	MC, NL, PT, SE, BF,	BJ, CF, CG, CI,			
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	CA 2312935	A1	19990617	CA 1998-2312935	19981009 <			
	CA 2312935	С	20060314					
	AU 9912301	A	19990628	AU 1999-12301 EP 1998-955494	19981009 <			
	AU 741859	B2	20011213					
	EP 1036062	A1	20000920	EP 1998-955494	19981009 <			
		B1						
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		LV, FI,						
	BR 9813360 TR 200001611	A	20001017	BR 1998-13360	19981009 <			
	TR 200001611	T2	20001023	TR 2000-1611 HU 2001-845	19981009 <			
	HU 2001000845				19981009 <			
	HU 2001000845	A3	20021228					
	JP 2001525396	T	20011211	JP 2000-524264	19981009 <			
	JP 2001525396 JP 3445242 NZ 504421 AT 257151 PT 1036062	B2	20030908		19981009 <			
	NZ 504421	A	20020201	NZ 1998-504421 AT 1998-955494				
	AT 25/151	T	20040115					
	PT 1036062	T	20040430	PT 1998-955494 ES 1998-955494	19981009 19981009			
	ES 2212373 AP 930	T3	20040716 20010126	AP 1998-1412	19981203 <			
			MW, SD, UG,		19961203 <			
		GH, KE,	20000605		19981204 <			
	NO 2000002826		20000726		20000602 <			
	NO 2000002020	A 1	20000726	NO 2000-2020	20000602 <			
	HR 2000000373 BG 104506	V AT	20001231	HR 2000-373 BG 2000-104506	20000605 <			
	MX 2000PA05520	A A	20010131	MX 2000-104500	2000005 <			
	US 6495568	B1	20010219					
PRAT					20011012			
EIVAL	GB 1997-25782 WO 1998-EP6640	W	19981009					
os	MARPAT 131:4474		19901009					
03	PHILLI 131:44/4							

GI

$$\begin{array}{c|c} R^2 & R^1 & \\ R^2 & R^1 & \\ R^2 & R^2 & \\ R^3 & R^3 & \\ R^4 & \\ R^6 &$$

AB Title compds. [I; dotted line = optional double bond; A = C, CH; B = CH2, O, null; RI, R2 = H, (substituted) alkyl, alkenyl; RIR2C = (benzo-fused) C3-6 cycloalkyl group optionally incorporating O, SO, SOZ, NR6; R3 = H, halo, R7, OR7; R4 = H, alkyl, alkoxy, CF3, halo; R6 = H, alkyl; R7 = (substituted) monor bicyclic ring system; m = 1, 2; n = 0-2; with the proviso that is in not O when A is C], were prepared as MMP inhibitors useful in the treatment of tissue ulceration, wound repair and skin diseases. Thus, Me 2-[4-(3-methyl-4-phenylphenyl)-1,2,3,6-tetrahydropyridin-1- ylsulfonyl]acetate (preparation given) was refluxed with NH2OH.HCl and K2CO3 in THF/MeOH to give N-hydroxy-2-[4-(3-methyl-4-phenylphenyl)-1,2,3,6-tetrahydropyridin-1- ylsulfonyl]acetamide. The latter inhibited matrix metalloproteinase 3 with ICSO = 16 nM.

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IT 227304-22-5P 227304-26-9P 227304-35-0P

227304-36-1P 227304-51-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-hydroxytetrahydropyridylsulfonylacetamides and related compds. as matrix metalloprotease inhibitors)

RN 227304-22-5 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[3,6-dihydro-4-(3'-methoxy-2-methy][1,1'-biphenyl]-4-y1)-1(2H)-pyridinyl]sulfonyl]tetrahydro-N-hydroxy- (CA INDEX NAME)

RN 227304-26-9 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[4-(3'-ethoxy-2-methyl[1,1'-biphenyl]-4-yl)-3,6-dihydro-1(2H)-pyridinyl]sulfonyl]tetrahydro-N-hydroxy- (CA INDEX NAME)

RN 227304-35-0 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[(4-[1,1'-biphenyl]-4-yl-3,6-dihydro-1(2H)-pyridinyl)sulfonyl]tetrahydro-N-hydroxy- (CA INDEX NAME)

## 10/722,104 (RCE)

RN 227304-36-1 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[4-(4'-ethoxy-2-methyl[1,1'-biphenyl]-4-yl)-3,6dihydro-1(2H)-pyridinyl]sulfonyl]tetrahydro-N-hydroxy- (CA INDEX NAME)

RN 227304-51-0 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[3,6-dihydro-4-(2-methyl[1,1'-biphenyl]-4-yl)-1(2H)-pvridinvl|sulfonvl|tetrahvdro-N-hvdroxy- (CA INDEX NAME)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 14 not 15

1 L4 NOT L5 L6

=> dis 16 bib abs fhitstr

- ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN 1.6
- AN 2004:467885 CAPLUS Full-text
- DN 141:38527
- TT Preparation of heteroarylsulfonylmethyl hydroxamic acids and amides and
- their use as protease inhibitors TN Becker, Daniel P.; Carroll, Jeffery N.; Fobian, Yvette M.; Grapperhaus,
- Margaret L.; Hansen, Donald W., Jr.; Heintz, Robert M.; Kassab, Darren J.; Massa, Mark A.; McDonald, Joseph J.; Nagy, Mark A.; Pitzele, Barnett S.; Rico, Joseph G.; Schmidt, Michelle A.; Spangler, Dale P.
- Pharmacia Corporation, USA PA
- SO PCT Int. Appl., 252 pp. CODEN: PIXXD2
- Patent
- DT
- LA English

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FAN.	CNT	1																	
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PI	PI WO 2004048368				A2 20040610			1	WO 2003-US37942				20031124						
	WO 2004048368					A3		2004	0812										
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
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		RW:	BW,																
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		U 2003300800							AU 2003-300800										
	EP	1565																	
		R:	AT,															PT,	
									MK,										
	BR 2003016506									BR 2003-16506 JP 2005-510336									
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		2005									MX 2	005-	PA54	74		2	0050	523	
PRAI		2002																	
		2003																	
		2003				W		2003	1124										
os	MAI	RPAT	141:	3852	7														

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AB Title compds. I [wherein Al = H, OH, cycloalkyloxy, heterocyclyloxy; A2, A3 = independently H, (un) substituted (cycloalakyl,thio), alkenyl, alknyl, heterocyclyl, etc.; or CA2A3 = (un) substituted cycloalkyl, heterocyclyl, such as tetrahydropyranyl; E1 = (un) substituted heteroaryl; E2 = (un) substituted cycloalkyl, E3 = a bond, O, CO, CO2, COC, S, OS, OS, OSC2, OSC2, CG-NH), C(=NOH), (un) substituted NH, CONH, NHCO, CONNHNHCO, NHCONH, NHSO2, SOZNH, NHC(=NH), NHC(=NOH), C(=NOH), NHC(=NOH), C(=NOH), NHC(=NOH), NHCO+NH, OH, Alkanoyl; E4 = H, halo, CN, (un) substituted (cyclo) alkyl, alkenyl, alkynyl, heterocyclyl; and salts thereof] were prepared as inhibitors of protease activity, particularly matrix metalloproteinase (MMP), TNF-c convertase, or aggrecanase activity. For example, coupling of 2-thiopheneboronic acid with 4-butoxybromobenzene gave 2-(4-butoxyphenyl)thiophene (59%), which was treated

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## 10/722,104 (RCE)

with Me disulfide and Oxone to afford the 5-(methylsulfonyl)thiophene derivative (58%). Reaction of the Me sulfone with t-Bu carboxylate anhydride using lithium bis(trimethylsilyl)amide provide the tert-Bu  $\alpha$ -(thienylsulfonyl)acetate (89%). Tert-Bu 4-[[5-(4-butoxyphenyl)thien-2-yl]sulfonyl]tertanyldro-2H-pyran-4-carboxylate (91%) was produced by cycloaddn. of the acetate with bis(bromoethyl) ether in the presence of 18-crown-6. Deesterification (85%) with TFA, followed by amidation (100%) with O-(tetrahydro-2H-pyran-2-yl)hydroxylamine and O-deprotection (74%) with HCl gave II. The latter inhibited the human recombinant MMP-1, MMP-2, MMP-9, MMP-13, and MMP-14 cleavage of peptide substrates with Ki values of >1250 nM, 0.483 nM, 0.806 nM, 0.127 nM, and 466 nM, resp. Thus, I and their pharmaceutical compns. are useful for treating tissue destruction, fibrotic diseases, matrix weakening, defective injury repair, cardiovascular disease, pulmonary disease, kidney disease, liver disease, ophthalmol. disease, and/or CNS diseases (no data).

IT 701270-37-3P, 4-[[5-(4-Butoxyphenyl)thien-2-yl]sulfonyl]-Nhydroxytetrahydro-2H-pyran-4-carboxamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (USes)

(protease inhibitor; heteroarylsulfonylmethyl hydroxamic acids and amides and their use as protease inhibitors)

RN 701270-37-3 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[5-(4-butoxyphenyl)-2thienyl]sulfonyl]tetrahydro-N-hydroxy- (CA INDEX NAME)

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